

## 16 Port Rack Mountable USB to Serial Hub

ICUSB23216F



\*actual product may vary from photos

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## FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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# Introduction

The ICUSB23216F 16 Port Rack Mountable FTDI USB to Serial RS232 Adapter Hub adds 16 RS232 Serial ports with data transfer rates up to 921.6 Kbps for control by a desktop or laptop computer system using a single USB port.

This durable hardened USB to RS232 hub offers an all metal chassis, which fits into standard 19" server storage racks for an organized industrial USB to COM port solution, and an extended -40°C to 85°C (-40°F to 185°F) operating temperature range allows for reliable use in even the harshest environments. Includes both an AC adapter and Terminal Block power options.

A reliable FTDI USB to serial chipset provides simple installation into a broad range of operating systems including Windows®, Linux and Mac OS, as well as COM port retention in the event the device is disconnected.

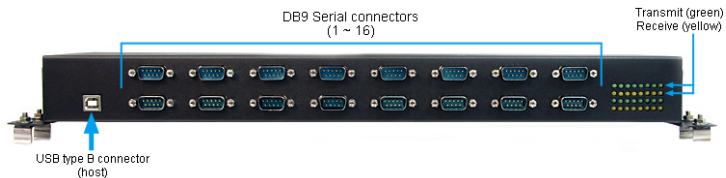
## Packaging Contents

- 1 x USB to RS232 Hub
- 1 x USB Cable
- 2 x Rack Mount Bracket
- 2 x DIN Rail Mount Bracket
- 1 x Power Adapter
- 1 x Driver CD
- 1 x Instruction Manual

## System Requirements

- USB enabled host computer system with available USB port
- Microsoft® Windows® 2000/XP/Server 2003/Vista/Server 2008 R2/7 (32/64-bit), or Windows CE 4.2/5.0/6.0, or Apple® Mac OS® 9.x/10.x, or Linux® kernel 2.4.x/2.6.x

## Front View



## Rear View



# Installation

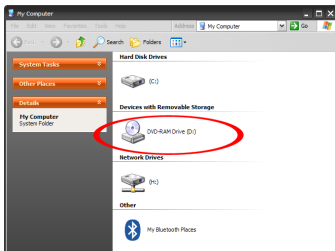
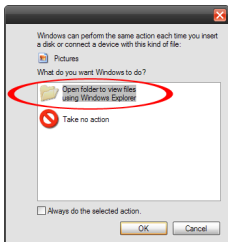


Please ensure that the driver installation is complete prior to the physical installation (plugging in) of the USB RS232 Serial Hub.

## Driver Installation

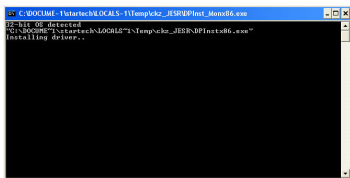
### Windows 2000/XP/Server 2003

1. Before connecting the Serial Hub to the host computer, insert the included Driver CD into the computer's CD/DVD drive.
2. AutoPlay should automatically launch and display all of the folders on the CD. If not, open "My Computer" and double-click on the CD/DVD drive.



\*installation photos for reference only

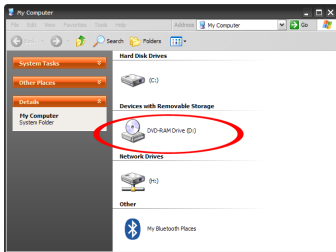
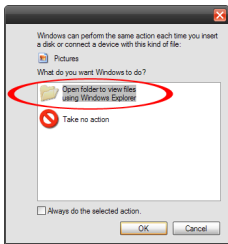
3. Enter the folder "232 drv\_100804", then double-click the file "Win\_Setup.exe".
4. This will launch the driver Installation wizard. The installation screen will automatically close once complete, and all the necessary drivers installed.



5. Connect the Serial Hub to the computer via USB. The Serial Hub will be automatically detected and Windows should begin installing the drivers.
6. Once Windows has installed the drivers, the serial ports will be ready for use.

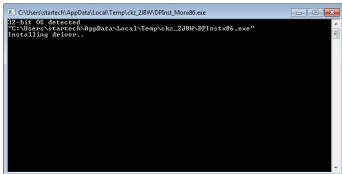
## Windows Vista/7/Server 2008 R2

1. Before connecting the Serial Hub to the host computer, insert the included Driver CD into the computer's CD/DVD drive.
2. AutoPlay should automatically launch and give you the option to display all of the folders on the CD. If not, open "Computer" and double-click on the CD/DVD drive.



\*installation photos for reference only

3. Enter the folder "232 drv\_100804", then double-click the file "Win\_Setup.exe".
4. This will launch the driver Installation wizard. The installation screen will automatically close once complete, and all the necessary drivers installed.

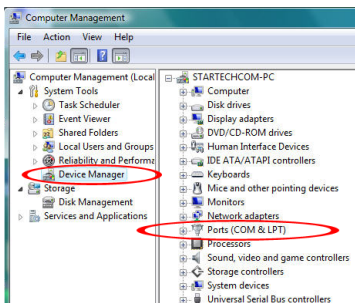
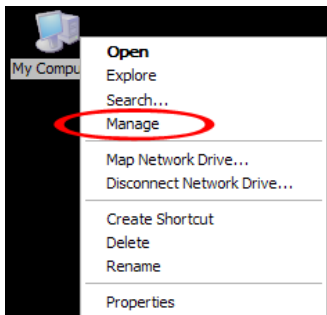


5. Connect the Serial Hub to the computer via USB. The Serial Hub will be automatically detected and Windows should begin installing the drivers.
6. Once Windows has installed the drivers, the serial ports will be ready for use.

## Verifying Installation

### Windows 2000/XP/Server 2003/Vista/Server 2008 R2/7

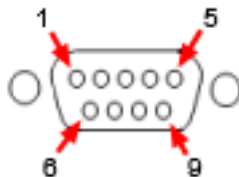
From the main desktop, right-click on "My Computer" ("Computer" in Vista/7), then select Manage. In the new Computer Management window, select Device Manager from the left window panel.



Double-click on the “Ports (COM & LPT)” option. The additional COM ports should be listed under this category.

## Pinout

Pin	Signal
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI





# Specifications

<b>Host Interface</b>	USB 2.0
<b>Chipset ID</b>	FTDI FT232R
<b>External Connectors</b>	16 x DB9 serial male 1 x USB type B female 1 x DC Power 1 x 2-wire terminal block
<b>LEDs</b>	16 x Transmit Activity 16 x Receive Activity
<b>Supported Protocols</b>	RS232
<b>Maximum Data Transfer Rate</b>	921.6 Kbps (per port)
<b>Data Bits</b>	7, 8
<b>Parity</b>	Odd, Even, Mark, Space, None
<b>Stop Bits</b>	1, 2
<b>Buffer Size</b>	256 byte transmit 128 byte receive
<b>Rack Mountable</b>	Yes
<b>Enclosure Material</b>	Metal
<b>Power Supply</b>	12V DC, 2500 mA, center positive, type N plug
<b>Operating Temperature</b>	-40°C ~ 85°C (-40°F ~ 185°F)
<b>Storage Temperature</b>	-65°C ~ 150°C (-85°F ~ 302°F)
<b>Humidity</b>	0% ~ 60% RH
<b>Dimensions (LxWxH)</b>	430.0mm x 120.0mm x 45.0mm
<b>Weight</b>	1520g
<b>Compatible Operating Systems</b>	Windows 2000/XP/Server 2003/Vista/ Server 2008 R2/7 (32/64-bit), CE 4.2/5.0/6.0, Mac OS 9.x/10.x, Linux 2.4.x/2.6.x

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